

The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A

BNL Beryllium Use Review Form

Dept C-A	Building 913	Room (Area, Location) AGS
Users (Name/Life#) or (Job Title): Cryogenics Group Technicians		
Status of beryllium use: <input checked="" type="checkbox"/> In use on frequent basis <input type="checkbox"/> Planned use in the near future <input type="checkbox"/> Possible Future Use <input type="checkbox"/> No planned use: <input type="checkbox"/> keep <input type="checkbox"/> dispose <input type="checkbox"/> Legacy (inherited): <input type="checkbox"/> keep <input type="checkbox"/> dispose		
Describe Use or Process (such as Analytical Standard, Window, Beam Tube, Attenuator, Sample Holder, Stock Material, etc.): Beam Pipes <input checked="" type="checkbox"/> Meets definition of "Article" <input type="checkbox"/> Meets definition of "laboratory use"		
Describe Handling Procedure: (such as "article removed from storage bag, and inserted into holder, without the need for physical alteration of article") Article BeCu circlip installed in magnet with appropriate tools.		
Potential for Airborne Exposure Assessment: (include measured or predicted air concentration and method of determining concentration) No airborne exposure expected based on previous experience at BNL		
Amount used: (such as grams per month) 8 circlips approximately 1.9 inches in diameter, approximately 10 grams each		
Frequency of use: (such as # days per year or month, # tests per year, in continuous use, etc.) Continuous permanent installation		
Precautions during Use: (check all that apply) <input type="checkbox"/> Always opened and used in lab hood <input type="checkbox"/> Handled on lab bench or room <input checked="" type="checkbox"/> Used in closed system <input type="checkbox"/> Other: <input type="checkbox"/> Parts encapsulated <input type="checkbox"/> Parts coated		Storage: (check all that apply) <input type="checkbox"/> In vented cabinet <input type="checkbox"/> On lab shelf, lab bench, or cabinet <input type="checkbox"/> Inside lab hood <input type="checkbox"/> Other: <input type="checkbox"/> Stored in labeled bags or bottles <input type="checkbox"/> Locked area/cabinet, access control
Written Documentation: <input type="checkbox"/> Experimental Review (Work Planning and Control for Experiments and Operation Subject Area) <input type="checkbox"/> Material recorded in CMS Inventory <input type="checkbox"/> Work Permit (1.3.6) <input checked="" type="checkbox"/> Static inventory <input type="checkbox"/> Written SOP (describe): <input type="checkbox"/> Each part bar coded		

Personal Protective Equipment used: <input checked="" type="checkbox"/> Gloves (describe material, thickness): vinyl or nitrile disposable <input type="checkbox"/> Impervious suit <input type="checkbox"/> Lab coat <input type="checkbox"/> BNL laundered clothing <input type="checkbox"/> Respirator, type:	
Spill, Release, Breakage Clean-up Plan (Describe possible release scenario and action, including clean-up worker training, exposure monitoring, personal protective equipment, and disposal): - Broken clips must be handled with care to avoid injury from sharp pieces and to avoid dispersal of any Be/Cu dust. - Workers must don disposable nitrile or vinyl gloves before collecting large pieces by hand. Large pieces should be placed in a rigid container, or heavy plastic bag, to avoid injury from sharp edges. Collection with tongs, tweezers, or forceps, is preferable. - Surfaces contaminated with broken articles should be wiped with alcohol-soaked rags after collection of large pieces to remove smaller pieces and any dust. - After wiping with alcohol-soaked rags, surfaces should be vacuumed with a dedicated beryllium HEPA-filtered vacuum. - Wipe samples should be done on all surfaces to ensure complete cleanup. This can be arranged through the ES&H Coordinator. - All waste must be labeled and disposed of as Hazardous Waste.	
Pollution Prevention Plan: (Describe pollution prevention and waste minimization measures): A dedicated beryllium vacuum cleaner is available to avoid the introduction of mixed waste.	
End of Project Plan: (Describe the actions when the use of beryllium is no longer needed, including accounting for material consumption and funding of disposal): Any unused beryllium will be disposed of as hazardous waste, or returned to the manufacturer if possible.	
Completed by: Peter Cirnigliaro <i>Signature on file</i>	Date:
Reviewed by: Asher Etkin <i>Signature on file</i>	Date:
Approved by: Ray Karol <i>Signature on file</i>	Date:



